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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,801	02/09/2005	Tomoyoshi Yamashita	047991-5017	6181
9629	7590	06/07/2006	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			CRANSON JR, JAMES W	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/523,801

Applicant(s)

YAMASHITA ET AL.

Examiner

James W. Cranson

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3 is/are rejected.
7) ☒ Claim(s) 1 and 4-22 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 09 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The disclosure is objected to because of the following informalities: page 7, lines 23-25, defines full width at half maximum as “an angle of full width of a spread angle in a half value with respect to a peak value”. This definition is not clear.

Appropriate correction is required.

Claim Objections

Claim 1 is objected to because of the following informalities: The word “led” in line six. Appropriate correction is required.

Claims 4-22 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and /or cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, claims 4-22 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in

Art Unit: 2875

the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1-3 include the limitation "full width at half maximum" which is defined @ www.axco.com as the width (spatial or angular) of a distribution at half of its maximum value. In the context of either beam intensity or divergence distribution, this definition must assume a finite width over which the peak "maximum" is sampled, which will vary with sample granularity and is sensitive to noise or count statistics significant within that granularity, often leading to significant error in the location at which the full-width is taken. Of even greater concern is the application of this definition to highly non-Gaussian distributions such as those often encountered in focussed-beam spatial or angular intensity distributions, where a large proportion of X-ray flux may exist in "tails" of the distribution below the half-maximum value. The specification on page 7, lines 23-25, defines full width at half maximum as "an angle of full width of a spread angle in a half value with respect to a peak value". These definitions do not agree with one another.

Further even if examiner accepts applicants' definition, examiner does not understand the meaning of "an angle of full width of a spread angle in a half value with respect to a peak value".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because full width at half maximum is indefinite as evidenced by the difference in definitions cited above.

Art Unit: 2875

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0063234 A1 to Oda et al..

Oda discloses a planar light source device including light source, light guide, light deflection element, polarization separation element and improves an uneven luminance distribution to a even luminance distribution.

Regarding claim 1:

A planar light source device (figure 1) comprising: a primary light source (12); a light guide (11) leading light emitted from the primary light source (12) , and having a light incident face (11a) to which the light emitted from the primary light source (12) comes in, and a light emitting face (11d) from which the led light goes out; a light deflection element (15) disposed adjacent to the light emitting face of the

light guide (11); and a polarization separation element (16,[0056]) disposed on the side of a light outgoing surface (figure 1) of the light deflection element (15) and having a function of transmitting one of polarization components of an incident light and [0056] reflecting the other of the polarization components.

Oda et al. does not have that a full width at half maximum of a luminance distribution of the incident light upon the polarization separation element in a direction parallel to a travel direction of the light in the light guide is 25 degrees or less.

Since the structure in the Oda patent publication and the instant invention are the same, it would have been obvious to one of ordinary skill in the art at the time of invention that the same functional characteristics as recited in lines 12-15 of claim 1 would be present in the Oda.patent publication.

Regarding claim 2, according to claim 1:

Oda et al. does not have that a full width at half maximum of a luminance distribution of the incident light upon the polarization separation element in a direction vertical to a travel direction of the light in the light guide is 50 degrees or less.

Since the structure in the Oda patent publication and the instant invention are the same, it would have been obvious to one of ordinary skill in the art at the time of invention that the same functional characteristics as recited in lines 16-19 of claim 2 would be present in the Oda.patent publication.

Regarding claim 3, according to claim 1 or 2:

Oda does not have that wherein an average value of the full width at half maximum of the luminance distribution of the incident light upon the polarization separation element in directions vertical and parallel to the travel direction of the light in the light guide is 33.degree. or less.

Since the structure in the Oda patent publication and the instant invention are the same, it would have been obvious to one of ordinary skill in the art at the time of invention that the same functional characteristics as recited in lines 20-24 of claim 3 would be present in the Oda.patent

publication.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is USPN 6,079,841 to Suzuki.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Cranson whose telephone number is 571-272-2368. The examiner can normally be reached on Mon-Fri 8:30A.M.- 5:00P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.




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